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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/543,663	04/05/2000	Roland Lamer	15-IS-5288(70191/235)	7305

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EXAMINER
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FRENEL, VANEL

ART UNIT	PAPER NUMBER
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3626

DATE MAILED: 03/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/543,663

Applicant(s)

LAMER ET AL.

Examiner

Vanel Frenel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 19-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 19-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### Notice to Applicant

1. This communication is in response to the amendment filed 12/12/03. Claims 1-11, and 19-31 are pending.

### Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-11 and 19-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wong et al (6,260,021) in view of Mukherjee (6,314,415).

(A) As per claim 1, Wong discloses a data management system for patient data, comprising:

a first component having a functionality code segment and a user interface code segment (Col.8, lines 65-67 to Col.9, line 21);

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a second component having a functionality code segment and a user interface code segment (Col.8, lines 65-67 to Col.9, line 21);  
and a container application having a first user interface layer in communication with the first component and a second user interface layer in communication with the second component (Col.6, lines 1-55).

Wong does not explicitly disclose wherein the first and second user interface layers are configured to convert the first user interface code segment of the first component and the second user interface code segment of the second component to a uniform user interface and to communicate patient data between the functionality code segments of the first and second components, respectively, and the uniform user interface.

However, this feature is known in the art, as evidenced by Mukherjee. In particular, Mukherjee teaches the first and second user interface layers are configured to convert the first user interface code segment of the first component and the second user interface code segment of the second component to a uniform user interface and to communicate patient data between the functionality code segments of the first and second components, respectively, and the uniform user interface (See Mukherjee, Col.11, lines 37-67 to Col.12, line 67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Mukherjee within the system of Wong with the motivation of providing features that facilitate data entry, avoid redundant and unnecessary information from graphical user interfaces, and permit changes to

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the user interfaces (and resulting forms) without relying on "hardcoded" software (See Mukherjee, Col.2, lines 19-24).

(B) As per claim 2, Wong discloses the data management system wherein the functionality code segment of the first component is configured to store and retrieve patient image data (Col.10, lines 13-27).

(C) As per claim 3, Wong discloses the data management system wherein the functionality code segment of the second component is configured to store and retrieve patient text data (Col.1, lines 52-59).

(D) As per claim 4, Wong discloses the data management system wherein the first and second user interface layers are configured to format the patient data from the first and second functionality code segments with the same look and feel (Col.3, lines 31-60).

(E) As per claim 5, Wong discloses the data management system, the container further comprising a first service layer in communication with the first component and a second service layer in communication with the second component, wherein the first and second service layers are configured to communicate data between the functionality code segments of the first and second components and a service (Col.12, lines 65-67 to Col.13, line 59).

(F) As per claim 6, Mukherjee discloses the data management system wherein the service includes a telecommunication service (See Mukherjee, Col.6, lines 55-67).

(G) As per claim 7, Wong discloses a data management system for patient data, comprising: a first application for retrieving patient image data from a database and having a first user interface (Col.10, lines 13-47);

a second application for processing patient text data and having a second user interface (Col.7, lines 1-58); and

Wong does not explicitly disclose a data manager in communication with the first and second applications, wherein the data manager includes a user interface code segment in communication with the first and second applications for converting the first user interface and the second user interface to a uniform user interface and for receiving the patient image data and patient text data for generating display signals based on the patient image data and the patient text data according to a predetermined display format.

However, this feature is known in the art, as evidenced by Mukherjee. In particular, Mukherjee teaches a data manager in communication with the first and second applications, wherein the data manager includes a user interface code segment in communication with the first and second applications for converting the first user interface and the second user interface to a uniform user interface and for receiving the patient image data and patient text data for generating display signals based on the

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patient image data and the patient text data according to a predetermined display format (See Mukherjee, Col.11, lines 37-67 to Col.12, line 67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Mukherjee within the system of Wong with the motivation of providing features that facilitate data entry, avoid redundant and unnecessary information from graphical user interfaces, and permit changes to the user interfaces (and resulting forms) without relying on "hardcoded" software (See Mukherjee, Col.2, lines 19-24).

(H) As per claim 8, Wong discloses the data management system further comprising a display unit configured to receive the display signals and provide a display based on the display signals (Col.7, lines 29-37).

(I) As per claim 9, Wong discloses the data management system wherein the predetermined display format has a look and feel for both the patient image data and the patient text data (Col.11, lines 17-64).

(J) As per claim 10, Wong discloses the data management system further comprising a third application configured to process data, the user interface code a segment in communication with the third application and configured to receive the data and to generate display signals based on the data (Col.13, lines 2-44).

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(K) As per claim 11, Wong discloses the data management system wherein the third application is in communication with the internet (Col.8, lines 53-67 to Col.9, line 21).

(L) As per claim 19, Wong discloses a data management system for patient data, comprising:

first means for processing patient image data, the first means having a first user interface means (Col.10, lines 13-67 to Col.11, line 48);

second means for processing patient text data, the second means having a second user interface means (Col.11, lines 17-64; Col.14, lines 1-42). Wong does not explicitly disclose third means for communicating between the first and second means, for converting the first user interface means and the second user interface means to a uniform user interface and for displaying the patient image data and patient text data according to a predetermined display format.

However, this feature is known in the art, as evidenced by Mukherjee. In particular, Mukherjee suggests third means for communicating between the first and second means, for converting the first user interface means and the second user interface means to a uniform user interface and for displaying the patient image data and patient text data according to a predetermined display format (See Mukherjee, Col.11, lines 37-67 to Col.12, line 67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Mukherjee within the system of Wong with the motivation of providing features that facilitate data entry, avoid redundant and



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unnecessary information from graphical user interfaces, and permit changes to the user interfaces (and resulting forms) without relying on “hardcoded” software (See Mukherjee, Col.2, lines 19-24).

(M) As per claim 20, Wong discloses the data management system wherein the first means includes a PACS component (Col.1, lines 21-37).

(N) As per claim 21, Wong discloses the data management system wherein the first means includes a user interface code segment, and the third means includes a user interface layer in communication with the user interface code segment (Col.13, lines 1-44).

(O) As per claim 22, Wong discloses a method of displaying patient data from a plurality of applications, comprising: receiving patient image data using a first application having a first user interface (Col.11, lines 4-48); receiving patient text data using a second application having a second user interface (Col.7, lines 1-58); converting the first user interface and the second user interface to a uniform user interface (See, Wong, Col.12, lines 6-62).

Wong does not explicitly disclose configuring both the patient image data and patient text data according to a predetermined display format; and displaying the configured patient image data and patient text data.

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However, this feature is known in the art, as evidenced by Mukherjee. In particular, Mukherjee suggests configuring both the patient image data and patient text data according to a predetermined display format; and displaying the configured patient image data and patient text data (See Mukherjee, Col.11, lines 37-67 to Col.12, line 67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to have included the feature of Mukherjee within the system of Wong with the motivation of providing features that facilitate data entry, avoid redundant and unnecessary information from graphical user interfaces, and permit changes to the user interfaces (and resulting forms) without relying on "hardcoded" software (See Mukherjee, Col.2, lines 19-24).

(P) As per claim 23, Wong discloses the method further comprising receiving the patient image data from a PACS database (Col.1, lines 21-38).

(Q) As per claim 24, Mukherjee discloses the method wherein the predetermined display format includes a display format for an icon (See Mukherjee, Col.5, lines 30-67 to Col.6, line 54).

(R) As per claim 25, Mukherjee discloses the method wherein the predetermined display format includes a display format for a menu (Col.7, lines 15-67 to Col.8, line 52).

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(S) As per claim 26, Wong discloses the method further comprising communicating the patient image data through a user interface layer (Col.1, lines 65-67 to Col.2, line 37).

(T) As per claim 27, Wong discloses the method further comprising providing patient image data to one of the internet and an intranet (Col.6, lines 44-55).

(U) As per claim 28, Wong discloses the data management system further comprising a third component having a functionality code segment and a third user interface code segment, wherein the container application is configured to communicate patient between the functionality code segments of the first, second and third components, respectively, and the uniform user interface (Col.8, lines 15-67).

(V) As per claim 29, Wong discloses the data management system wherein the functionality code segment of the third component is configured to communicate with the Internet (Col.6, lines 44-55).

(W) As per claim 30, Wong discloses the data management system wherein the service communications with the first and second service layers via a predetermined protocol (Col.8, lines 31-67).

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(X) As per claim 31, Wong discloses the data management system wherein the predetermined protocol includes componentware (Col.8, lines 53-67).

### ***Response to Arguments***

5. Applicant's arguments filed on 12/12/03 with respect to claims 1-11, 19-31 have been fully considered but they are not persuasive.

Applicant's arguments filed 12/12/03 have been fully considered but they are not persuasive. Applicant's arguments will be addressed hereinbelow in the order in which they appear in the response filed 12/12/03.

(A) At pages 7-12 of the 12/12/03 response, Applicant argues the followings:

(a) Wong does not disclose, teach or suggest converting a first user interface of a first component or application and a second user interface of a second component or application into a uniform user interface.

(b) Neither Wong nor Mukherjee, in combination or alone, discloses teaches or suggests converting a first user interface of a first component or application and a second user interface of a second component or application into a uniform user interface.

(B) With respect to Applicant's first argument, Examiner respectfully suggests that Wong discloses "Generally, the system includes one of more interface engines, for providing image objects with uniform structure regardless of the type of existing system on which they are stored, and image server middleware, for managing the distribution of image objects. The system also includes a security object server, for authorizing user

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access to the image distribution system and to particular objects, a personalization object server, for providing user interface preferences and client workstation capabilities, and a web server, for downloading initial access pages and user interface components. The system implements a method for medical image distribution according to which image data stored in existing picture storage systems is first converted into a uniformly structured image objects before being composed for downloading to client workstations for user viewing. The system and method of this invention are easily extensible both for added function and for added performance. The system and method of this invention are preferably implemented according to CORBA standards. In a first embodiment, this invention includes a medical image distribution system for distributing medical images from one or more existing storage systems to a plurality of network-attached client workstations, said medical image distribution system comprising one or more computer systems, and wherein each said network-attached client workstation is configured with an object-oriented graphical interface for receiving medical image requests from a user and for displaying medical image objects to the user; and wherein said one or more computer systems are configured with one or more interface engines, each said interface engine for retrieving medical image data from one or more existing storage systems and for presenting retrieved medical image data as medical image objects with a uniform object-oriented structure, and one or more image object coordinators for receiving medical image requests transmitted from one of said graphical interfaces, for obtaining medical image objects in said uniform object-oriented structure from said one or more interface engines, for composing said medical image

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objects for display by said graphical interface, and for transmitting said composed medical image objects to the requesting graphical interface” which correspond to Applicant’s claimed feature (See Wong, Col.3, lines 41-67 to Col.4, line 15). Therefore, Applicant’s argument is not persuasive.

(C) With respect to Applicant’s second argument, Examiner respectfully submits the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

The issue of obviousness is not determined by what the references expressly state but by what they would reasonably suggest to one of ordinary skill in the art, as supported by decisions in *In re DeLisle* 406 Fed.1326, 160 USPQ 806, *In re Kell, Terry and Davies* 208 USPQ 871; and *In re Fine*, 837 F. 2d 1071, 1074, 5 USPQ 2d 1596, 1598 (Fed. Cir.1988) citing *In re Lalu*, 747 F.2d 703, 705, 223 USPQ 1257, 1258 Fed. Cir. 1988)). Further, it was determined in *In re Lamberti et al*, 192 USPQ 278 (CCPA) that :

- (i) obviousness does not require absolute predictability;
- (ii) non-preferred embodiments of prior art must also be considered; and
- (iii) the question is not express teaching of references, but what they would suggest.

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In response, all of the limitations which Applicant disputes as missing in the applied references, including the features newly added in the 12/12/03 amendment, have been fully addressed by the Examiner as either being fully disclosed or obvious in view of the collective teachings of Wong and/or Mukherjee, based on the logic and sound scientific reasoning of one ordinarily skilled in the art at the time of the invention, as detailed in the remarks and explanations given in the preceding sections of the present Office Action (Paper number 12). One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In addition, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

### **Conclusion**

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited but not applied art teaches medical diagnostic report forming apparatus capable of attaching image data on report (5,581,460) and image data management system particularly for use in a hospital (5,586,262).

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vanel Frenel whose telephone number is 703-305-4952. The examiner can normally be reached on 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on 703-305-9588. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-7687 for regular communications and 703-305-7687 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1113.



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Hand-delivered responses should be brought to:

Crystal Park 5, 2451 Crystal Drive,  
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V.F  
March 5, 2004

  
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